Zimmer et al.

Serial No.: 10/696,878

Filing Date: October 30, 2003

## **REMARKS**

Claims 25-45 were pending. Applicants have hereinabove cancelled without prejudice claims 25-45 and have submitted new claims 46-58. No new matter has been added by this Amendment. Accordingly, applicants respectfully request that the Examiner enter this Amendment. Upon entry of this Amendment, new claims 46-58 will be pending.

## Rejection Under 35 U.S.C. § 103(a)

In the April 20, 2007 Office Action, the Examiner rejected the previously pending claims under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,517,863 ("LaTorre") in view of WO 00/76486 ("Ballantone").

In response, applicants respectfully traverse the Examiner's rejection under 35 U.S.C. § 103(a). Without conceding the correctness of the Examiner's bases for rejecting the previously pending claims and to expedite prosecution of the instant application, applicants have hereinabove cancelled without prejudice claims 25-45 and have submitted new claims 46-58, which applicants maintain are not obvious over the cited references.

Applicants note that new claim 46 is the only presently pending independent claim. New claim 46 recites:

A method for abrading human or animal tissue comprising abrading the tissue with a bioactive material which comprises between about 30% and about 96% by weight of silicon dioxide oxide (SiO<sub>2</sub>), between about 0% and about 35% by weight of sodium oxide (Na<sub>2</sub>O), between about 4% and about 46% by weight calcium oxide (CaO), and between about 1% and about 15% by weight phosphorus oxide (P<sub>2</sub>O<sub>5</sub>).

Applicants have, *inter alia*, determined the scope and content of the cited references and have ascertained the differences between the cited references and the pending independent claim in order to evaluate properly the Examiner's obviousness rejection. Having done so, applicants

4

Zimmer et al.

Serial No.: 10/696,878

Filing Date: October 30, 2003

maintain that in sharp contrast to the pending independent claim, the cited references taken together or alone do not disclose, teach or suggest applicants claimed methods for abrading human or animal tissue with bioactive materials. Indeed, as shown below, the primary reference actually teaches away from the presently claimed invention. The cited references will be addressed in more detail below.

Reviewing the scope and content of LaTorre, it is clear that the reference merely describes compositions and methods for treating nails (i.e., fingernails and toenails) and adjacent tissues with interlinked particles of bioactive glass to form layers of hydroxyapatite. For example, methods described by LaTorre relate to applying effective nail-enhancing amounts of bioactive glass compositions to nails and adjacent tissues for a sufficient time to cause formation of hydroxyapatite or other calcium phosphate mineral layer on the nail surface. (See Abstract) LaTorre also describes soaking nails in aqueous solutions to allow hydroxyapatite formation. (See, Col. 2, lines 48-50) LaTorre refers to the use of such compositions to form a protective layer on the nail body to harden and increase the durability of the nail. (See, Col. 3, lines 1-6) LaTorre further describes the benefits of keeping the compositions in contact with the nail for an extended period of time. (See, Col. 6, lines 2-3). Likewise, both of LaTorre's Examples are directed to treating fingernails with either a paste (Example 1) or solution (Example 2) to harden and strengthen nails. In sharp contrast to the pending independent claim, a careful review of LaTorre reveals that the reference is completely silent with respect to any dermabrasion method.

As set forth above, the pending independent claim specifically recites a dermabrasion method that involves abrading tissue with bioactive material. Consistent with applicants' specification, the American Heritage Dictionary's primary definition for the verb "abrade" is "to wear down or rub away by friction; erode." Thus, LaTorre actually teaches away

5

Attorney Docket No. 99866/15

Zimmer et al.

Serial No.: 10/696,878

Filing Date: October 30, 2003

from the presently claimed method, since it is directed to methods that build up a hydroxyapatite

layer rather than any process that causes "wearing down" or "eroding."

Applicants maintain that the secondary reference Ballantone does not cure the

deficiencies of LaTorre recited above. Indeed, the Examiner simply relied to Ballantone for its

description of particular metal ions. However, like LaTorre, Ballantone is completely silent with

respect to dermabrasion methods.

Accordingly, applicants respectfully submit that new independent claim 46 is not

rendered obvious by LaTorre in view of Ballantone.

**Dependent Claims** 

For the reasons stated above with respect to new independent claim 46, applicants

maintain that new dependent claims 47-58 are not rendered obvious by the cited references alone

or in any combination.

**Obviousness-Type Double Patenting Rejections** 

In the April 20, 2007 Office Action the Examiner rejected the pending claims on

the ground of non-statutory obviousness-type double patenting based on U.S. Patent No.

7,141,520 ("the '520 Patent") and U.S. Patent No. 7,192,602 ("the '602 Patent"). The Examiner

also provisionally rejected the claims for non-statutory obviousness-type double patenting based

on U.S. Application Serial No. 10/673,596 ("the '596 Application").

Applicants respectfully traverse the Examiner's obviousness-type double

patenting rejections. Neither the '520 Patent nor the '602 Patent discusses dermabrasion

methods involving the abrasion of human or animal tissue. Accordingly, applicants respectfully

request that the Examiner reconsider and withdraw this basis for rejection.

6

KL3 2605958.1

Attorney Docket No. 99866/15

Zimmer et al.

Serial No.: 10/696,878

Filing Date: October 30, 2003

With respect to the '596 Application, applicants respectfully request that the

Examiner hold in abeyance the provisional non-statutory obviousness-type double patenting

rejection of the claims base on the '596 Application until claims in at least one of the '596

Application and the instant application have been allowed. Applicants then can determine

whether a terminal disclaimer should be submitted in the instant application or in the '596

Application.

Conclusion

In view of the foregoing, applicants respectfully request that the Examiner

reconsider and withdraw the rejections set forth in the April 20, 2007 Office Action and allow

the presently pending claims, namely claims 46-58.

No fee, other than the fee for a one-month extension of time is believed to be

necessary in connection with the filing of this Amendment. If any additional fee is deemed to be

necessary, applicants hereby authorize such fee to be charged to Deposit Account No. 50-0540.

If a telephone interview would be of assistance in advancing prosecution of this

application, applicants' undersigned attorney encourages the Examiner to telephone him at the

number provided below.

Respectfully submitted,

Dated: August 3, 2007

/Robert E. Alderson/

Robert E. Alderson, Reg. No. 44,500

KRAMER LEVIN NAFTALIS & FRANKEL LLP

1177 Avenue of the Americas

New York, New York 10036

(212) 715-9100 (telephone)

(212) 715-8000 (facsimile)

7

KL3 2605958.1